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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,068	01/22/2001	John K. Gallant	RIC00018	2495

7590 05/05/2004

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EXAMINER	
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ART UNIT	PAPER NUMBER
2661	7

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/768,068	GALLANT ET AL.	
	Examiner	Art Unit	
	Anthony T Ton	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6,8-26,29-37,40,41 and 44* is/are rejected.

7)☒ Claim(s) *4,5,7,27,28,38,39,42 and 43* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification Objections

1. The disclosure is objected to because of the following informalities:

a) Appropriate Application Serial No. in lines 14, 19, 23 and 28 of page 1 and in lines 2-3 of page 2 should be provided.

b) A table on the top of page 17, which is used to tabulate ATM setup message parameters, has not been labeled by any name.

Examiner suggests adding term "**Table 1**" to the top of the table for being distinguished with other tables in the specification.

c) A table at the bottom of page 36, which is used to tabulate input ATM setup message parameters and value, has not been labeled by any name.

Examiner suggests adding term "**Table 2**" to the top of the table for being distinguished with other tables in the specification.

d) A table on the top of page 37, which is used to tabulate output ATM setup message parameters and value, has not been labeled by any name.

Examiner suggests adding term "**Table 3**" to the top of the table for being distinguished with other tables in the specification.

e) Term "Party Subaddress" in page 37 line 5 (the 4th row of the table that has been objected in the item (d) above) is not proper.

Examiner suggests changing this term to "**Called** Party Subaddress".

Appropriate correction is required.

Claim Objections

2. **Claim 8** is objected to because of the following informalities:

Term "**an SVC**" in line 3 is not appropriate article.

Examiner suggests changing this term to "a **SVC**".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of **the second paragraph** of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. **Claim 22** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim recites limitation "**wherein the second multi-service control point is the multi-service control point are the same multi-service control point**" in lines 1-4 is vague and indefinite since the claimed language structure is not adequately disclosed. Does the applicant mean that "the second multi-service control point and the first multi-service control point are the same multi-service control point"?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-3, 6, 8-16, 18-26,29-37, 40, 41 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Christie et al** (Christie 525) (US Patent No. **6,081,525**) in view of **Christie et al** (Christie 195) (US Patent No. **6,430,195**).

a) **In Regarding to Claim 1**: **Christie 525 disclosed** an intelligent network for use with an ATM network to set up an ATM switched virtual circuit to provide VToA services *(see Fig.5: block 500)*, the intelligent network comprising:

a multi-service control point (MSCP) operable to receive an input extracted from an input ATM setup message that includes a called party phone number value and a VToA designator, and generate an output in response for use in generating an output ATM setup message *(see Fig.5: blocks 520 and 534 (the combination of these two blocks can be considered as multi-service control point since the block 520 is used for Signaling Transfer Point "STP", and the block 534 is used for a communications setup when it is in control function; **note that** the block 534 is used to manage in both control function and connection function, its name is "Control/Connection Manager - CCM" as disclosed in col.5 lines 61-62; therefore, it is not only treated as a "MSCP", but sometimes it is also treated as an "ASIP"; and such "MSCP" and "ASIP" are disclosed by the instant claim); see col.2 lines 19-35: receiving the signaling (an input) for calls, generating control message (an output); see col.18 lines 6-10: The initial address message "IAM" initiates the call and contains call set-up information such as the dialed number (called party phone number value); see col.9 lines 39-64: virtual paths are designated in ATM cells by the VPI, Muxes convert the user information into cells that*

identify the selected connection. User information can be switched through an ATM fabric on a call by call basis (in the ATM switching, a call basis is required to provide switched virtual circuits "SVC" or switched virtual paths "SVP"; and therefore, as such can be considered as Voice Telephony over ATM "VToA", and VPI can be considered as a VToA designator or SVC for VToA))

an ATM signaling intercept processor (ASIP) operable to intercept the input ATM setup message from an ingress ATM edge switch of the ATM network *(see Fig.5: block 534, signaling processor (ASIP))*, communicate the input to the multi-service control point *(see the connection between block 534 (ASIP) and block 520 (MSCP) in Fig.5)*, receive the output generated by the multi-service control point *(see col.7 lines 43-45: signaling messages for calls arrive on link 290 are routed by STP 260 (MSCP) to CCM 250 (ASIP))*, generate the output ATM setup message using the output *(see col.2 lines 24-28: generating a control message (the output ATM setup message))*, and communicate the output ATM setup message to the ingress ATM edge switch of the ATM network *(see the connection between block 534 (ASIP) and block 536 (ingress ATM edge switch) in Fig.5)*; and

a service administration (SA) operable to provision the multi-service control point and the ATM signaling intercept processor *(see col.14 lines 16-47: Platform handler 620 is also responsible for managing and monitor CCM (ASIP) activities, handling administrative messages)*.

Christie 525 failed to explicitly teach an ASIP operable to intercept an input ATM setup message from an ingress ATM edge switch of the ATM network, and extract an input from the input ATM setup message.

Christie 195 disclosed a signal processor, an ATM MUX, an input ATM setup message from an ingress ATM edge switch of an ATM network, and extract an input from the input ATM setup message *(see Figs.11: blocks 1160 and 1150. In which, the signal processor (1160) and ATM MUX (1150) are considered as an ASIP and ingress ATM edge switch, respectively; and see Figs.4-7 and col.6 lines 24-35: in which, IAM "initial address message" is considered as an input ATM setup message that is intercepted by the signal processor (ASIP) to extract an input (SS7 IAM) from such an input ATM setup message (IAM))*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such an ASIP throughout the signal processor of Christie 525, and as such an ASIP was already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize bandwidth more efficiently.

b) **In Regarding to Claim 2**: **Christie 525 further disclosed** wherein the input includes a calling party phone number value *(see col.17 lines 29-46: IAM includes calling party number)*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

c) **In Regarding to Claim 3**: **Christie 525 disclosed** all subject matters of this claim as set forth in Claims 1 and 2.

Christie 525 failed to explicitly disclose wherein the input includes an ATM address of the calling party CPE. **However, Christie 525 disclosed** that communication users 110 and 120 as shown in Fig.1, which could be any entity that supplies telecommunications traffic to the ATM network. One example would be a CPE *(see col.3 lines 57-60)*. Therefore, **Christie 525 inherently disclosed** such an input that includes an ATM address of the calling party CPE because before establishing a connection between two CPEs in an ATM network, the address of calling CPE should be included in the input ATM setup message for such a connection.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

d) **In Regarding to Claim 6**: **Christie 525 further disclosed** wherein the output includes an ATM address of the called party *(see col.18 lines 6-7: IAM initiates the call and contains call setup information, such as dialed number)*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

e) **In Regarding to Claim 8**: **Christie 525 further disclosed** wherein the multi-service control point determines if the input ATM setup message requests an SVC for VToA by analyzing the VToA designator portion of the input *(see Fig.2 and col.7 lines 43-67: Signaling messages for calls arrive on link 290 and are routed by STP 260 to CCM 250. The signaling received by the CCM 250 would identify (request) the access*

connections for the calls. Since multiple virtual connections are pre-provisioned from ATM interface 230 to the destination network, the CCM 250 can select a virtual connection to the destination (hence the input ATM setup message has requested an SVC for VToA); and see Fig.5 and col.12 lines 24-34: In which, if user 510 were to placed the call during the day, the CCM would determine that user 512 was destination, and in this case ATM system would not be used (hence in this case the input ATM setup message has not requested an SVC for VToA).

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

f) **In Regarding to Claim 9**: **Christie 525 further disclosed** wherein the multi-service control point further includes: a database that correlates the called party phone number value with an ATM address of the called party CPE, and wherein the multi-service control point includes the ATM address of the called party CPE in the output *(see col.10 lines 37-40: an SCP is a processor and database that answers signaling queries to assist in call processing; and see col.7 lines 43-67: table look-ups (in this table any selection process related to called party CPE as well as the ATM address of the called party CPE can be accomplished)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

g) **In Regarding to Claim 10**: **Christie 525 further disclosed** wherein the multi-service control point further includes: a database that correlates the called party phone

number value with a forwarded called party phone number value when the called party phone number value has been forwarded, correlates the forwarded party phone number value with an ATM address of the forwarded party CPE, and wherein the multi-service control point includes the forwarded party phone number value and the ATM address of the forwarded party CPE in the output *(see col.10 lines 37-40: an SCP is a processor and database that answers signaling queries to assist in call processing; see col.7 lines 43-67: table look-ups (in this table any selection process related to called party CPE as well as the ATM address of the called party CPE can be accomplished); and see col.15 line 9-23: a signal representing the destination point is forwarded to the corresponding detection point process (hence, the signal is a control point that includes the forwarded party phone number value and the ATM address of the forwarded party CPE in the output))*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

h) **In Regarding to Claim 11**: **Christie 525 further disclosed** wherein the multi-service control point further includes: a database that correlates the called party phone number value with a translated called party phone number value when the called party phone number should be translated, correlates the translated party phone number value with an ATM address of the translated party CPE, and wherein the multi-service control point includes the translated party phone number value and the ATM address of the translated party CPE in the output *(see col.16 lines 2-19: the dialed number, the translated dialed number)*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

i) **In Regarding to Claim 12**: **Christie 525 disclosed** all aspects of the claim 12 as set forth in claim 1, and a rejection of a connect message is in similar to the rejection of a setup message.

Christie 525 failed to explicitly teach an ASIP operable to intercept an input ATM connect message from an ingress ATM edge switch of the ATM network, and extract an input from the input ATM connect message.

Christie 195 disclosed such an ASIP operable to intercept an input ATM connect message from an ingress ATM edge switch of the ATM network, and extract an input from the input ATM connect message *(see Figs 4 and 5: arrows that labeled with "connect ANM")*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such an ASIP throughout the signal processor of Christie 525, and as such an ASIP was already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize bandwidth more efficiently.

j) **In Regarding to Claim 13**: **Christie 525 disclosed** all aspects of the claim 12 as set forth in claim 1, and a rejection of a release message is in similar to the rejection of a release message.

Christie 525 failed to explicitly teach an ASIP operable to intercept an input ATM release message from an ingress ATM edge switch of the ATM network, and extract an input from the input ATM release message.

Christie 195 disclosed such an ASIP operable to intercept an input ATM release message from an ingress ATM edge switch of the ATM network, and extract an input from the input ATM release message *(see Figs 6 and 7: arrows that labeled with "REL" or "RELEASE")*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such an ASIP throughout the signal processor of Christie 525, and as such an ASIP was already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize bandwidth more efficiently.

k) **In Regarding to Claim 14**: **Christie 525 further disclosed** wherein the multi-service control point includes various applications operable to provide VToA services through analyzing the input to generate the output *(see Fig.3: blocks OC3, DS3, DS1, DS0 and Digital Signal Processing)*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

l) **In Regarding to Claim 15**: **Christie 525 further disclosed** wherein the ATM signaling intercept processor includes a call model operable to model multiple switched virtual circuits, including the ATM switched virtual circuit, for providing VToA using the

ATM network *(see col.4 lines 1-8: an ATM cross-connect is the NEC model 10; and see col.15 lines 1-4: call model of ITU-T Q.1214).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

m) **In Regarding to Claim 16**: **Christie 525 further disclosed** wherein the ATM edge switch receives the input ATM setup message in a predefined format from a customer premises equipment *(see col.3 lines 57-60: CPE).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

n) **In Regarding to Claim 18**: **Christie 525 disclosed** all aspects of the claim 18 as set forth in claim 1.

Christie 525 failed to explicitly teach wherein the content exchanged through the ATM switched virtual circuit of the ATM network includes video. **Christie 195 disclosed** such wherein the content exchanged through the ATM switched virtual circuit of the ATM network includes video *(see col.1 line 64-col.2 line 3).*

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such a video throughout voice traffic of Christie 525, and as such a video was already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize broadband systems at lower costs.

o) **In Regarding to Claim 19**: **Christie 525 further disclosed** wherein the content exchanged through the ATM switched virtual circuit of the ATM network includes data *(see col.13 lines 42-52: The SCF identifies services and obtain data for the service).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

p) **In Regarding to Claim 20**: **Christie 525 further disclosed** wherein the multi-service control point is operable to determine if the called party phone number value is valid, and wherein the input ATM setup message is rejected if the called party phone number value is not valid *(see col.22 lines 45-58: The Coding Standard will be screened to ensure that the standard is coded 00. All others will be rejected; and see col.23 lines 12-22: The IAM called party number should be handled. Presentation allowed/restricted will be screened).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

q) **In Regarding to Claims 21 and 22**: **Christie 525 further disclosed** the intelligent network further comprising: a second multi-service control point operable to receive an egress input extracted from the output ATM setup message that includes the called party phone number value, and generate an egress output in response *(see Fig.5: in combination of blocks 522 and 538; and see the described on the MSCP in the claim 1 above),*

a second ATM signaling intercept processor operable to intercept the output ATM setup message from an egress ATM edge switch of the ATM network, extract the egress input from the output ATM setup message, communicate the egress input to the second multi-service control point, receive the egress output generated by the multi-service control point, generate an ATM setup message using the egress output, and communicate the ATM setup message to the egress ATM edge switch of the ATM network, and wherein the service administration is operable to provision the second multi-service control point and the second ATM signaling intercept processor *(see Fig.5: blocks 522 and 524, block 538, and block 530. Basically, the functions of these blocks are operating similarly as that of blocks 518 and 520, block 534, and block 526 as described in the claim 1 above. However, these blocks are interfaces between the ATM cross-connections 542-544 and the destination user 516).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

r) **In Regarding to Claim 23**: **Christie 525 further disclosed** wherein the service administration maintains a database of record *(see col.14 lines 33-39: handling administrative messages from the CCM modules, and handling messages form network operation such as queries, configuration instructions, and update data (maintain)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

s) **In Regarding to Claim 24: Christie 525 further disclosed** wherein the service administration provides an interface to the multi-service control point and the ATM signal intercept processor *(see col.14 lines 39-47: The connection to the various CCM modules (MSCP). The connection to the network operations is the man machine interface, which allows the CCM to be controlled and monitored by either a remote or local operator (hence provides a interface to the MSCP)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

t) **In Regarding to Claim 25: Christie 525 further disclosed** wherein the ingress ATM switch has a device side portion and a network side portion *(see fig.3: blocks 305, 310, 315, 320 and 325 represent for a device portion of an ATM Mux (ingress ATM switch), whereas block 335 of the Mux is used to connect to a network).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 1.

u) **In Regarding to Claim 26: Christie 525 disclosed** an ATM telecommunications network with an intelligent network for providing VToA services using an ATM switched virtual circuit *(see Fig.1)*, the ATM telecommunications network comprising:

an ATM network operable to communicate ATM cells and ATM messages *(see Fig.1: block 150)*;

an ingress ATM edge switch in communication with the ATM network and an ingress CPE *(see Fig.1: block 130)*;

an egress ATM edge switch in communication with the ATM network and an egress CPE *(see Fig.1: block 140)*,

an intelligent network that includes:

a multi-service control point operable to receive an input extracted from the input ATM setup message that includes a called party phone number value and a VToA designator, and generate an output in response for use in generating the output ATM setup message *(see the described in the claim 1 above)*,

an ATM signaling intercept processor operable to intercept the input ATM setup message from the ingress ATM edge switch, extract the input from the input ATM setup message, communicate the input to the multi-service control point, receive the output generated by the multi-service control point, generate the output ATM setup message using the output, and communicate the output ATM setup message to the ingress ATM edge switch of the ATM network *(see the described in the claim 1 above)*,

a second multi-service control point operable to receive an egress input extracted from the output ATM setup message that includes the called party phone number value, and generate an egress output in response *(see Fig.5: in combination of blocks 522 and 538; and see the described on the MSCP in the claim 1 above)*,

a second ATM signaling intercept processor operable to intercept the output ATM setup message from the egress ATM edge switch of the ATM network, extract the egress input from the output ATM setup message,

communicate the egress input to the second multi-service control point, receive the egress output generated by the multi-service control point, generate an ATM setup message using the output, and communicate the ATM setup message to the egress ATM edge switch of the ATM network *(see Fig.5: blocks 522 and 524, block 538, and block 530. Basically, the functions of these blocks are operating similarly as that of blocks 518 and 520, block 534, and block 526 as described in the claim 1 above. However, these blocks are interfaces between the ATM cross-connections 542-544 and the destination user 516)*,

a service administration operable to provision the multi-service control point, the ATM signaling intercept processor, the second multi-service control point and the second ATM signaling intercept processor *(see the described in the claim 1 above)*.

Christie 525 failed to explicitly teach an ingress ATM edge switch operable to receive an input ATM setup message from an ingress CPE and to communicate an output ATM setup message to the ATM network; and an egress ATM edge switch operable to receive the output ATM setup message from the ATM network and to communicate an ATM setup message to an egress CPE.

Christie 195 disclosed such ingress and egress ATM edge switches *(see block "broadband system interface" in Fig.2 and block ATM Mux in Fig.11)*.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such an ingress ATM edge switch operable to receive an input ATM setup message from an ingress CPE and to communicate an output ATM

setup message to the ATM network; and an egress ATM edge switch operable to receive the output ATM setup message from the ATM network and to communicate an ATM setup message to an egress CPE throughout the ingress and egress ATM Muxes of Christie 525, and as such ingress and egress ATM edge switches were already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize bandwidth more efficiently.

v) **In Regarding to Claim 29**: This claim is rejected for the same reasons as claims 1 and 8 because the apparatus in claims 1 and 8 can be used to practice the method steps of **Claim 29**.

x) **In Regarding to Claim 30**: **Christie 525 further disclosed** wherein analyzing the information to determine if the input ATM setup message is a request to set up an SVC for VToA includes checking for the presence of a VToA designator *(see col.18 line 59- col.19 line 1: analyze information typically entails verifying that dialed number is legitimate and checking call information for any applicable services; and see col.15 lines 24-35: if the processing results in a service request or notification, a corresponding signal is sent to a feature manager. Detection point responses from the feature manager are forwarded back to the appropriate call process (hence checking for the presence of a VToA designator))*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

y) **In Regarding to Claim 31**: **Christie 525 further disclosed** wherein extracting information from the input ATM setup message includes generating an input from the input ATM setup message that includes a called party phone number value and a VToA designator *(see col.2 lines 36-57: a signaling processor operable to receive and process the signaling to select (extract) the virtual connection for the call, and to generate and transmit a control messages that identifies the particular connection and the selected virtual connection (hence a called party phone number and a VToA are included in the control messages)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

z) **In Regarding to Claim 32**: **Christie 525 further disclosed** wherein analyzing the information to determine if the input ATM setup message is a request to set up an SVC for VToA includes analyzing the input to determine if the input includes the VToA designator *(see col.18 line 59- col.19 line 1: analyze information typically entails verifying that dialed number is legitimate and checking call information for any applicable services).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z1) **In Regarding to Claim 33**: **Christie 525 further disclosed** wherein determining an ATM address of a called party CPE includes correlating the called party phone number value of the input with the ATM address of the called party CPE using a database *(see col.10 lines 37-40: an SCP is a processor and database that answers*

signaling queries to assist in call processing; and see col.7 lines 43-67: table look-ups (in this table any selection process related to called party CPE as well as the ATM address of the called party CPE can be accomplished)).

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z2) **In Regarding to Claim 34**: **Christie 525 further disclosed** wherein generating an output ATM setup message that includes the ATM address of a called party CPE further includes generating the output ATM setup message that includes the called party phone number value *(see col.2 lines 36-57: generate and transmit a control messages (output ATM setup message) that identifies the particular connection and the selected virtual connection (hence a called party phone number is included in the control messages))*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z3) **In Regarding to Claim 35**: **Christie 525 further disclosed** wherein intercepting the input ATM setup message from the ingress ATM edge switch of the ATM network, and extracting information from the input ATM setup message are performed using an ATM signaling intercept processor *(see col.2 lines 36-57: a signaling processor (in this the signal processor is considered as an ASIP that uses to extract information from the input ATM setup message) operable to receive and process the signaling to select (extract) the virtual connection for the call)*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z4) **In Regarding to Claim 36**: **Christie 525 further disclosed** wherein analyzing the information to determine if the input ATM setup message is a request to set up an SVC for VToA, and determining the ATM address of the called party CPE are performed using a multi-service control point *(see col.18 line 59- col.19 line 1: analyze information typically entails verifying that dialed number is legitimate and checking call information for any applicable services; and see Fig.5: block 534 (in this case the CCM block 534 is considered as a MSCP; therefore, the called party CPE is performed by using the MSCP))*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z5) **In Regarding to Claim 37**: **Christie 525 further disclosed** wherein generating an output ATM setup message that includes the ATM address of a called party CPE is performed using the ATM signaling intercept processor *(see col.2 lines 36-57: The telecommunications system comprises a signaling processor (ASIP) operate to receive and process the signaling to select the virtual connection for the call, and to generate and transmit a control messages (output ATM setup message))*.

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z6) **In Regarding to Claim 40**: **Christie 525 further disclosed** wherein analyzing the information to determine if the input ATM setup message is a request to

set up an SVC for VToA further includes processing the information to provide VToA services *(see col.2 lines 20-35: The method comprises receiving the signaling for the call (the input ATM setup message) into the signaling processor and processing the signaling to select the virtual connection (hence SVC for VToA). The method further includes generating a control message in the signaling processor to identify the particular connection and the selected virtual connection, and transmitting the control message to the ATM interworking Mux (hence provide VToA services)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 29.

Z7) **In Regarding to Claim 41**: **Christie 525 disclosed** all aspects of the claim 41 as set forth in claim 1.

Christie 525 failed to explicitly disclose the following steps of the method:

receiving the input ATM setup message at a device side of an ingress ATM edge switch of the ATM network; and

intercepting the input ATM setup message from the device side of the ingress ATM edge switch of the ATM network.

Christie 195 clearly disclosed such steps:

receiving the input ATM setup message at a device side of an ingress ATM edge switch of the ATM network *(see block 1355 in Fig.13)*; and

intercepting the input ATM setup message from the device side of the ingress ATM edge switch of the ATM network *(see link 1354 in Fig.13; and see the 3rd arrowed line counted from the top to bottom in Fig.4: this line has been gone through the*

Signaling Processing, it means that the input ATM setup message was intercepted by the Signaling Processor).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such steps throughout the broadband system of Christie 525, and as such steps were already implemented by Christie 195 for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** to utilize bandwidth more efficiently and provide SVC for VToA.

Z8) **In Regarding to Claim 44**: **Christie 525 further disclosed** the method further comprising: processing the information to provide VToA services after analyzing the information to determine if the VToA designator is present *(see col.18 line 59-col.19 line 1: analyze information typically entails verifying that dialed number is legitimate and checking call information for any applicable services; and see col.15 lines 24-35: if the processing results in a service request or notification, a corresponding signal is sent to a feature manager. Detection point responses from the feature manager are forwarded back to the appropriate call process (hence provide VToA services after analyzing the information to determine if the VToA designator is present)).*

It would have been obvious to combine Christie 525 and Christie 195 for the same reason as in Claim 41.

7. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Christie et al** (Christie 525) (US Patent No. **6,081,525**) in view of **Allen, Jr. et al** (US Patent No. **6,169,735**).

Christie 525 disclosed all aspects of claim 17 as set forth in Claim 1.

Christie 525 failed to disclose wherein the ATM edge switch receives the input ATM setup message from an enterprise gateway.

Allen, Jr. et al disclosed such a gateway *(see Fig.4: block 28; and see col.8 lines 6-9: an exemplary T-IWF 28 is a succession multiservice gateway 4000).*

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement such a gateway throughout ATM Mux of Christie 525, as taught by Allen, Jr. et al for operating a telecommunications system that interworks between Customer Premises Equipments and an ATM system, **the motivation being** able to handle dynamic allocation of VPI/VCI connection assignments required to support SVC in VToA communications systems.

Allowable Subject Matter

8. **Claims 4, 5, 7, 27, 28, 38, 39, 42 and 43** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony T Ton whose telephone number is 703-305-8956. The examiner can normally be reached on M-F: 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W Olms can be reached on 703-305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATT
4/22/2004

KENNETH VANDERPUYE
PRIMARY EXAMINER